

Project ALERT

Program description:

Project ALERT is a middle/junior high school-based program to prevent tobacco, alcohol, and marijuana use. Over 11 sessions in the 7th grade and 3 boosters in the 8th grade, the program helps students understand that most people do not use drugs and teaches them to identify and resist the internal and social pressures that encourage substance use.

Typical age of primary program participant: 13

Typical age of secondary program participant: N/A

Meta-Analysis of Program Effects

| Outcomes Measured | Primary or Secondary Participant | No. of Effect Sizes | Unadjusted Effect Sizes (Random Effects Model) | | | Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis | | | | | |
|------------------------------|----------------------------------|---------------------|--|------|---------|---|------|-----|-----------------------------|------|-----|
| | | | | | | First time ES is estimated | | | Second time ES is estimated | | |
| | | | ES | SE | p-value | ES | SE | Age | ES | SE | Age |
| Age of initiation (tobacco) | P | 4 | -0.03 | 0.05 | 0.00 | 0.05 | 0.05 | 15 | 0.05 | 0.05 | 25 |
| Age of initiation (cannabis) | P | 4 | -0.04 | 0.08 | 0.02 | -0.03 | 0.08 | 15 | -0.03 | 0.08 | 25 |
| Age of initiation (alcohol) | P | 4 | 0.02 | 0.04 | 0.10 | 0.01 | 0.04 | 15 | 0.01 | 0.04 | 25 |

Benefit-Cost Summary

| The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2. | Program Benefits | | | | | Costs | Summary Statistics | | | |
|--|------------------|------------|-------|----------------|----------------|-------|-----------------------|-----------------------|----------------------|---|
| | Partici-pants | Tax-payers | Other | Other Indirect | Total Benefits | | Benefit to Cost Ratio | Return on Invest-ment | Benefits Minus Costs | Probability of a positive net present value |
| | \$2 | \$2 | \$1 | \$3 | \$7 | | \$0.05 | n/e | -\$138 | 1% |

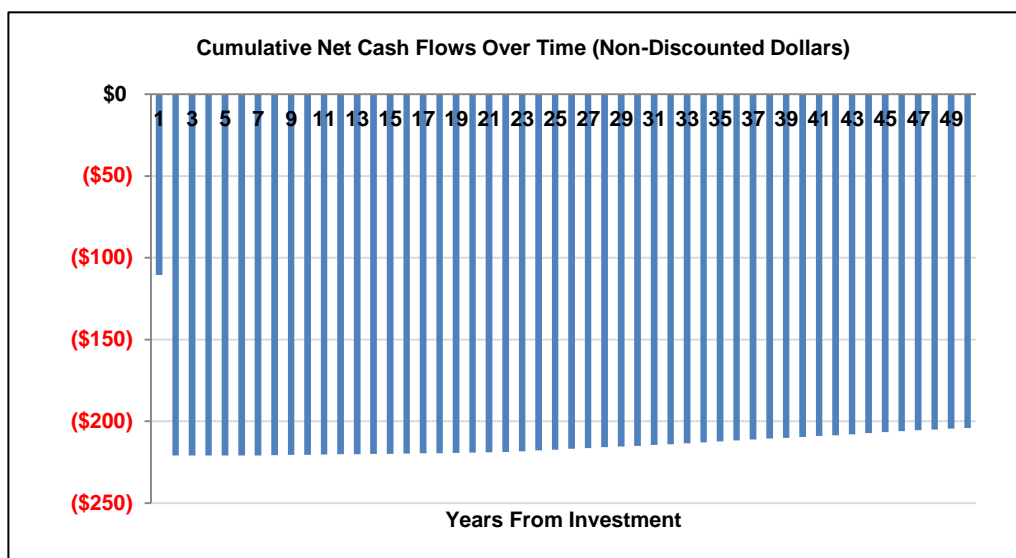
Detailed Monetary Benefit Estimates

| Source of Benefits | Benefits to: | | | | Total Benefits |
|--|---------------|------------|-------|-----------------|----------------|
| | Partici-pants | Tax-payers | Other | Other In-direct | |
| Earnings via regular smoking | \$0 | \$0 | \$0 | \$2 | \$2 |
| Health care costs for regular smoking | \$0 | \$1 | \$1 | \$0 | \$2 |
| Earnings via alcohol disorder | \$3 | \$1 | \$0 | \$1 | \$4 |
| Health care costs for alcohol disorder | \$0 | \$0 | \$0 | \$0 | \$1 |
| Earnings via cannabis disorder | -\$2 | -\$1 | \$0 | \$0 | -\$2 |

Detailed Cost Estimates

| The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2. | Program Costs | | | Comparison Costs | | | Summary Statistics | |
|--|---------------|------------------|--------------|------------------|------------------|--------------|--|------------------------|
| | Annual Cost | Program Duration | Year Dollars | Annual Cost | Program Duration | Year Dollars | Present Value of Net Program Costs (in 2011 dollars) | Uncertainty (+ or - %) |
| | \$60 | 2 | 2002 | \$0 | 2 | 2002 | \$145 | 10% |

Source: Miller, T.R., and Hendrie, D. (2005). "How should governments spend the drug prevention dollar: A buyer's guide." In: Stockwell, T., Gruenewald, P., Toumbourou, J., and Loxley, W., eds. *Preventing harmful substance use: The evidence base for policy and practice*. Chichester, England: John Wiley & Sons. pp. 415–431.



Multiplicative Adjustments Applied to the Meta-Analysis

| Type of Adjustment | Multiplier |
|---|------------|
| 1- Less well-implemented comparison group or observational study, with some covariates. | 0.5 |
| 2- Well-implemented comparison group design, often with many statistical controls. | 0.5 |
| 3- Well-done observational study with many statistical controls (e.g., instrumental variables). | 0.75 |
| 4- Random assignment, with some implementation issues. | 0.75 |
| 5- Well-done random assignment study. | 1.00 |
| Program developer = researcher | 0.5 |
| Unusual (not "real-world") setting | 0.5 |
| Weak measurement used | 0.5 |

Studies Used in the Meta-Analysis

- Bell, R. M., Ellickson, P. L., & Harrison, E. R. (1993). Do drug prevention effects persist into high school? How Project ALERT did with ninth graders. *Preventive Medicine*, 22(4), 463-483.
- Ellickson, P. L., Bell, R. M., & McGuigan, K. (1993). Preventing adolescent drug use: Long-term results of a junior high program. *American Journal of Public Health*, 83(6), 856-861.
- Ellickson, P. L., McCaffrey, D. F., Ghosh-Dastidar, B., & Longshore, D. L. (2003). New inroads in preventing adolescent drug use: Results from a large-scale trial of Project ALERT in middle schools. *American Journal of Public Health*, 93(11), 1830-1836.
- Ringwalt, C. L., Clark, H. K., Hanley, S., Shamblen, S. R., Flewelling, R. L. (2009). Project ALERT: A cluster randomized trial. *Archives of Pediatrics and Adolescent Medicine*, 163(7), 625-632.
- St Pierre, T. L., Osgood, D. W., Mincemoyer, C. C., Kaltreider, D. L., & Kauh, T. J. (2005). Results of an independent evaluation of Project ALERT delivered in schools by cooperative extension. *Prevention Science*, 6(4), 305-317.